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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/653,217

09/03/2003

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25944 7590 10/17/2007
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EXAMINER

DAVIS, ZACHARY A

ART UNIT

PAPER NUMBER

2137

MAIL DATE

DELIVERY MODE

10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/653,217

Applicant(s)

SATAKE ET AL.

Examiner

Zachary A. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, Claims 1-13 and 19, in the reply filed on 27 July 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Specifically, Applicant merely alleges that "the subject matter of all claims is sufficiently related that a thorough search for the subject matter of any one Group of claims would encompass a search for the subject matter of the remaining claims" and therefore the search could be made without serious burden (page 1 of the response received 27 July 2007). However, the Examiner notes that Applicant has not cited any evidence in support of this assertion, nor has Applicant specifically addressed the showings in the requirement for restriction that the inventions are independent or distinct and are classified separately. Therefore, Applicant's argument amounts to a general allegation that does not distinctly and specifically point out the supposed errors in the requirement for restriction, which fails to comply with the requirements of 37 CFR 1.111(b).

2. Claims 14-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 27 July 2007.

Response to Arguments

3. Applicant's arguments with respect to claims 1-13 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

4. The drawings are objected to because they contain typographical errors. Specifically, in Figure 3, step S18, it appears that "infomrration" is intended to read "information". Also, in Figure 5, in the parenthetical note, it appears that the phrase "a further separate devices" should read "further separate devices" or "a further separate device" for agreement. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or

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"New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure is objected to because it includes two paragraphs. The abstract should be limited to a single paragraph. Further, the abstract includes a grammatical error; namely, the first sentence of the abstract is a fragment. Correction is required. See MPEP § 608.01(b).

6. The disclosure is objected to because of the following informalities:

The specification appears to contain minor typographical and other errors. For example, on page 5, line 15, the phrase "deciding a volume of data stored in a RAM" is generally vague. On page 6, line 11, it appears that "peripherals" should read "peripheral". On page 10, line 28, the phrase "The way of thinking is that..." is generally informal and narrative, and further is somewhat unclear in its phrasing. On page 12, line 29, in the phrase "to which the job data is distributed to", it appears that the second "to" should be deleted. On page 17, lines 10-11, the phrase "The fundamental way of thinking behind this calculation is as follows" is generally informal and narrative. On page 17, line 28, it appears that "mount" is intended to read "amount". On page 18, line 18, it appears that in the phrase "the RAM 14 HDD 16", either a conjunction should be

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inserted between the two items or one of the two items should be deleted. On page 20, line 14, the phrase "In Figure 9, and structural elements" appears to be missing language.

Appropriate correction is required. The above is not to be considered an exhaustive list of errors in the specification. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

7. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 recites that the size of the job data distributed to the second storage device is based on an amount of free space in the second device, but Claim 1 has also been amended to recite that the distribution is based on available space in the second device.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the part" in lines 10 and 12 of the claim. In particular, the limitations further recite "the part stored on the second storage device" and "the part of the job data file stored on the second storage device". However, the limitation in lines 6-9 recites that the job data file is divided into a plurality of parts that are distributed between the first and second storage devices, which suggests that there may be more than one part stored on each of the first and second devices. If there is more than one part stored on the second device, then the limitation "the part stored on the second storage device" is unclear, because it is not clear to which of the multiple parts this is intended to refer. This renders the claim indefinite.

Claims 2-13 are rejected due to their dependence on rejected Claim 1.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 1-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jin, Korean Patent Application Publication KR 1993-0008657 (cited by Applicant on the information disclosure statement received 11 October 2005), in view of Hutchison, US Patent Application Publication 2003/0145218.

In reference to Claims 1 and 13, Jin discloses a device having a first storage device and a second storage device capable of having stored data erased at a faster speed than the first storage device (see abstract, where there is a memory and a hard disk or floppy disk) and a storage controller that divides a job data file into a plurality of parts and distributes the parts between the first and second storage devices where data stored on the second storage device is not stored on the first device (see abstract). However, Jin does not explicitly disclose a deletion controller for deleting the part of the file stored on the second storage device.

Hutchison discloses a job processing device having a storage controller that stores a job data file on a storage device (paragraph 0019) and a deletion controller that deletes at least part of the data file when a prescribed deletion condition is satisfied (paragraph 0019 and 0031-0036). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Jin to include the deletion controller of Hutchison, in order to aid in protection of the print data (see Hutchison, paragraph 0003; see also paragraph 0031).

In reference to Claim 2, Jin and Hutchison further disclose a job data reconstructor that reconstructs the distributed data files (Jin, abstract) and a job processing unit that executes jobs based on job data (Hutchison, paragraph 0016),

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where completion of the job execution is the prescribed deletion condition (Hutchison, paragraph 0019).

In reference to Claims 3 and 4, Jin and Hutchison further disclose the second storage device being volatile memory or an area of the main storage device (Jin, abstract; Hutchison, paragraphs 0015 and 0019).

In reference to Claim 5, Jin and Hutchison further disclose encrypting the job data before distributing the data (Jin, abstract; Hutchison, paragraph 0020).

In reference to Claims 6-8, Jin and Hutchison further disclose distributing the job data according to a rule that can be changed according to the state of the job processing device or an attribute of the job (Jin, abstract; see also Hutchison, paragraphs 0028, and 0031-0036).

In reference to Claim 9, Jin and Hutchison further disclose deleting remaining job data after deleting part of the job data (Hutchison, paragraphs 0019; 0031-0036).

In reference to Claims 10 and 11, Jin and Hutchison further disclose that the deletion condition can be receipt of a job deletion instruction or a halt job execution instruction from a user (Hutchison, paragraphs 0019 and 0031-0036).

In reference to Claim 12, Jin and Hutchison further disclose permitting execution of the next job at the time of completion of deletion processing (Hutchison paragraphs 0015, 0016, and 0019).

Claim 19 is directed to a method that corresponds substantially to the device of Claim 1, and is rejected by a similar rationale.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Cavill, US Patent 6003069, discloses a system in which a print job is divided among several processes to increase efficiency.
- b. Coorman et al, US Patent 6665641, discloses a system in which the manner in which data is distributed between various media with different access speeds in order to increase efficiency of data access speed.
- c. Wada, US Patent 7159193, discloses an apparatus in which print information is divided and sent to two different memories.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BAO
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Cynthia Britt 10/14/07
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PRIMARY EXAMINER